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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,299

03/12/2004

Jeffrey Collins

T00486-0010-US2
(190244-3)

5778

7590

03/23/2005

EXAMINER

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CANADA

ART UNIT

PAPER NUMBER

3737

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,299

Applicant(s)

COLLINS ET AL.

Examiner

Baisakhi Roy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/3/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 15 and 16 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 15 should be dependent on claim 14 since it is further limiting the encoder. Claim 16 should not be dependent on claim 17.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 as indicated previously, is inaccurately dependent on claim 17 and it is not clear as to which claim it is further limiting.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-7 and 10-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Haddad (6475150). Haddad discloses an ultrasound based medical imaging system comprising a patient support surface, an imaging apparatus with a support table, a chamber to receive a portion of the patient, and sensors (fig. 1) for monitoring a medical condition with said system (abstract) comprising a base or stage (306), a drum or chamber (310), a transducer head rotating with said drum and displaced relative to said drum along an axis parallel to the axis of rotation, said head including a plurality of transducers each operable to propagate a wave along an axis of propagation and receive signals from respective focal zones spaced relative to one another along said axis of propagation (fig. 1-3, col. 2 lines 57-67, col. 4 lines 7-64, fig. 12 lines 32-42 lines 47-65). Haddad further teaches said axis of propagation to be inclined at an angle to the axis of rotation with the axis of propagation inclined at an angle orthogonal to the target surface of the patient (col. 2 lines 51-65, col. 5 lines 4-18, col. 9 lines 35-48). The reference further teaches controlling said transducers by an electronic circuit which

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includes an amplifier to adjust the gain of signals with said transducers located in a channel in fluid communication with said drum and an encoder to indicate position of the drum about the axis and control operations at predetermined intervals with movement of the transducer head relative to the drum initiated upon attaining the registration position, and transferring of the data over a network (col. 2 lines 22-31, col. 3 lines 58-67, col. 4 lines 1-6 lines 31-63, col. 5 lines 3-18). Haddad also teaches adjusting each of the signals for attenuation and an attenuation profile is obtained from an evaluation of data collected during a scan (col. 5 lines 4-61, col. 9 lines 58-67).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Wake et al. (5952664). Wake et al. disclose a medical imaging system comprising a patient support surface, an imaging apparatus having a support table located within said support surface (fig. 1) and adjustable relative to the support surface and thereby engage a portion of the patient to be imaged (col. 4 lines 1-31). Wake et al. further teach said apparatus to include sensors to indicate orientation of the patient (col. 4 lines 60-67, col. 5 lines 1-24).

5. Claims 1-7 and 10-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (4222274). Johnson discloses an ultrasound based medical imaging

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system comprising a patient support surface, an imaging apparatus with a support table, a chamber to receive a portion of the patient, and sensors (figs. 1-4) for monitoring a medical condition with said system (abstract) comprising a base, a drum or chamber, a transducer head rotating with said drum and displaced relative to said drum along an axis parallel to the axis of rotation, said head including a plurality of transducers each operable to propagate a wave along an axis of propagation and receive signals from respective focal zones spaced relative to one another along said axis of propagation (abstract, col. 4 lines 37-68, col. 5 lines 1-15, col. 13 lines 14-40). Johnson further teaches said axis of propagation to be inclined at an angle to the axis of rotation with the axis of propagation inclined at an angle orthogonal to the target surface of the patient, controlling said transducers by an electronic circuit which includes an amplifier to adjust the gain of signals with said transducers located in a channel in fluid communication with said drum and an encoder to indicate position of the drum about the axis and control operations at predetermined intervals with movement of the transducer head relative to the drum initiated upon attaining the registration position, and transferring of the data over a network (col. 6 lines 29-68, col. 7 lines 1-35). Johnson also teaches adjusting each of the signals for attenuation and an attenuation profile is obtained from an evaluation of data collected during a scan (abstract, col. 11 lines 5-20).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haddad in view of Garlick et al. (6353576). Haddad discloses an ultrasound scanner to monitor a medical condition with the axis of propagation orthogonal to the rotation direction, as set forth above, but does not explicitly teach the specific angle values of said wave propagation. In the same field of endeavor, Garlick et al. disclose an ultrasound scanning system to monitor a medical condition with a wave propagation of 60° or higher (col. 5 lines 25-34). It would have therefore been obvious to one of ordinary skill in the art to use the wave propagation teaching by Garlick et al. to modify the teaching by Haddad such that the axis of propagation is between the suggested values and enable appropriate inclination.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baisakhi Roy whose telephone number is 571-272-7139. The examiner can normally be reached on M-F (7:30 a.m. - 4p.m.).

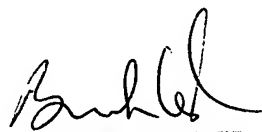
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B. L.

BR



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